CLAIMS:

1. Method of recording information on an optical disc comprising a first groove, a second groove adjacent to the first groove and a land separating the first groove from the second groove by a track pitch distance Tp where the grooves are filled with a dye, where the land is covered by the dye, the method comprising irradiating a region of the optical disc with a focused spot of optical energy having a radius R_0 between a center of the focused spot and a point in the focused spot where the optical energy 1/e times a maximum optical energy of the focused spot, characterized in that the track pitch distance Tp is less or equal to the radius R_0 times five divided by three.

2. Method as claimed in claim 1, characterized in that the track pitch distance Tp is less or equal to the radius R_0 times five divided by four.

3. Method as claimed in claim 1, characterized in that the track pitch distance Tp is less or equal to the radius R_0 times six divided by five.

4. Method as claimed in claim 1, characterized in that the track pitch is less or equal to R_0

5. Method as claimed in claim 1, 2, 3 or 4, characterized in that the sections of the grooves are pits.

6. Method as claimed in claim 1, 2, 3, 4 or 5, characterized in that the dye has an absorption which increases with increasing absorbed optical energy.

7. Method as claimed in claim 1, 2, 3, 4, 5 or 6, characterized in that the dye has a threshold for thermal decomposition or degradation and

that the threshold is reached between the center of the focused spot and a point in the focused spot where the optical energy is equal or more than 1/e times the maximum optical energy of the focused spot..

8. Method as claimed in claim 1, 2, 3 or 4,
characterized in that
the land is covered by a layer of the dye with a thickness at least 3 times thinner than a depth of the groove.

9. Method as claimed in claim 6, 7 or 8,
characterized in that the dye in the groove is thermally insulated from a reflection layer

10. Method as claimed in claim 1, 2, 3 or 4,
characterized in that adjacent marks are spatially aligned to each other.

11. Method as claimed in claim 5,
characterized in that adjacent pits are spatially aligned to each other.

12. Optical disc comprising a first groove, a second groove adjacent to the first groove and a land separating the first groove from the second groove by a track pitch distance Tp where the grooves are filled with a dye, where the land is covered by the dye, for irradiation of the optical disc with a focused spot of optical energy having a radius R_0 between a center of the focused spot and a point in the focused spot where the optical energy 1/e times a maximum optical energy of the focused spot, characterized in that the track pitch distance Tp is less or equal to the radius R_0 times five divided by three.

13. Optical disc as claimed in claim 12,
characterized in that the track pitch distance Tp is less or equal to the radius R_0 times five divided by four.

14. Optical disc as claimed in claim 12,
characterized in that the track pitch distance Tp is less or equal to the radius R_0 times six divided by five.

15. Optical disc as claimed in claim 12,
characterized in that the sections of the grooves are pits.

16. Optical disc as claimed in claim 12, 13 , 14 or 15,
characterized in that the dye has an absorption which increases with increasing absorbed optical energy.

17. Optical disc as claimed in claim 12, 13, 14, 15 or 16,
characterized in that the dye has a threshold for thermal decomposition or degradation and that the threshold is reached between the center of the focused spot and a point in the focused spot where the optical energy is equal or more than 1/e times the maximum optical energy of the focused spot.

18. Optical disc as claimed in claim 12,
characterized in that
the land is covered by a layer of the dye with a thickness at least 3 times thinner than a depth of the groove.

19. Optical disc as claimed in claim 16, 17, or 18,
characterized in that the dye in the groove is thermally insulated from a reflection layer

20. Optical disc as claimed in claim 12, 13 or 14,
characterized in that adjacent marks are spatially aligned to each other.

21. Optical disc as claimed in claim 15,
characterized in that adjacent pits are spatially aligned to each other.

22. Recorder for recording optical discs comprising means for recording information on an optical disc comprising a first groove, a second groove adjacent to the first groove and a land separating the first groove from the second groove by a track pitch distance Tp where the grooves are filled with a dye, where the land is covered by the dye, the recorder comprising irradiation means for projecting a focused spot of optical energy having a radius R_0 between a center of the focused spot and a point in the focused spot where the optical energy 1/e times a maximum optical energy of the focused spot on the optical disc,

characterized in that the radius R_0 is greater than or equal to the track pitch Tp times three divided by five.

23. Recorder for recording optical discs comprising means for recording information on an optical disc comprising a first groove, a second groove adjacent to the first groove and a land separating the first groove from the second groove by a track pitch distance Tp where the grooves are filled with a dye, where the land is covered by the dye, the recorder comprising irradiation means for projecting a focused spot of optical energy having a radius R_0 between a center of the focused spot and a point in the focused spot where the optical energy 1/e times a maximum optical energy of the focused spot on the optical disc, characterized in that the radius R_0 is greater than or equal to the track pitch Tp times four divided by five.

24. Recorder for recording optical discs comprising means for recording information on an optical disc comprising a first groove, a second groove adjacent to the first groove and a land separating the first groove from the second groove by a track pitch distance Tp where the grooves are filled with a dye, where the land is covered by the dye, the recorder comprising irradiation means for projecting a focused spot of optical energy having a radius R_0 between a center of the focused spot and a point in the focused spot where the optical energy 1/e times a maximum optical energy of the focused spot on the optical disc, characterized in that the radius R_0 is greater than or equal to the track pitch Tp times five divided by six.